

Amendments to the Specification:

On page 3, please replace the paragraphs after the heading "BRIEF DESCRIPTION OF THE DRAWINGS" which bridges page 4, with the following amended paragraphs.

FIG. 1 is a diagram of phase transformation temperature versus end chain length (m) of compound I (m, 2, 2) of the present invention.

FIG. 2 is a phase transformation diagram of compound II (10, p, q; p=0, 3~4, q=2~4) of the present invention during cooling process wherein the chiral terminal group is coupled with linear group or swallow-tailed group.

FIG. 3 is phase transformation diagram of compound III (X, Y) of the present invention wherein the halogen group is substituted with side chain.

FIG. 4 is the spontaneous polarity (P_s) of compound I (m, 2, 2).

FIG. 5 is the spontaneous polarity (P_s) of compound II (10, [[n]] p, q).

FIG. 6 is the spontaneous polarity (P_s) of compound III (X, Y) and unsubstituted compound I (10, 2, 2).

FIG. 7 is the diagram of transmitting response versus electric field of compound I (10, 2, 2), compound II (10, 0, 2) and compound III (Cl, H), after adding a triangle wave in a 5 m cell.

Please replace the Table 2 on page 5 which bridges page 6 with the following amended Table 2.

Table 2 Phase transformation temperature of compound II (10, p, q; n=0,3~4, q=2~4) and relative enthalpy data

Phase Transformation Temperature (°C) ^a										
Compound	Iso	SmA*		SmC*		SmX*		Cr.	^b mp.	^c
II(10, 0, 2)	●	146.5	●	117.8	●	31.6	●	16.83	●	60.3
I(10, 2, 2)	●	[5.59]	^d	[0.54]		[4.09]		[19.4]		[45.81]
		120.4	●	105.9	●	21.4			●	82.2
II(10, 3, 3)	●	[3.45]		[0.63]		[13.58]				[34.76]
		101.3	●	85.5	●	21.5			●	38.7
II(10, 4, 4)	●	[9.49]		[2.67]		[18.04]				[32.04]
		89.6	●	69.7	●	20.5			●	48.7
		[1.05]		[0.51]		[17.10]				[36.95]

^aRecorded by DSC thermograms at cooling rates of $5^{\circ}\text{C min}^{-1}$

^bCr refers to crystal.

^cm.p. refers to melting point taken from DSC thermograms recorded at heating rates of $5^{\circ}\text{C min}^{-1}$.

^dFigures in square parenthesis denote enthalpies quoted in Jg^{-1} .

On page 7, please replace the first full paragraph with the following amended paragraph.

FIG. 2 is a phase transformation diagram of compound I (10, 2, 2) and compound II (10, [[n]] p, q) of the present invention during cooling process, wherein the chiral terminal groups of compound I and II are coupled with linear group or swallow-tailed group. From the figure we know that if the chiral terminus is coupled with linear chain, the thermostability of SmA* and SmC* is excellent. Such character proves that the chain length of the chiral terminus effects the smetic phase formation. It also proves that the clear point and phase transformation temperature of SmA*-SmC* decreases as the chain length of swallow-tailed group increases. Therefore, the extended swallow-tailed group can stabilize SmA* phase but suppresses the formation of SmC*.

Appl. No. 10/799,625
Amendment dated: July 18, 2005
Reply to OA of: April 19, 2005

On page 8, please replace the second full paragraph with the following amended paragraph.

FIG. 5 shows that the highest P_s value of compound II (10, $[[n]]$ p, q) ranges from 97-119 nC · cm⁻². Comparing compound II (10, $[[n]]$ p, q) with compound I (10, 2, 2), the chiral compound with linear chain has less spontaneous polarity. On the other hand, comparing compound I (10, 2, 2) with compound II (10, 3, 3), it is observed that the compounds with longer swallow-tailed group have lower P_s value.